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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,687	03/09/2004	Shinsuke Fujita	04140/LH	4853
1933	7590	09/28/2005	EXAMINER	
FRISHAUF, HOLTZ, GOODMAN & CHICK, PC 220 5TH AVE FL 16 NEW YORK, NY 10001-7708			FETZNER, TIFFANY A	
			ART UNIT	PAPER NUMBER
			2859	

DATE MAILED: 09/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/797,687

Applicant(s)

FUJITA ET AL.

Examiner

Tiffany A. Fetzner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/7/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The information disclosure statement (IDS) submitted on 06/09/2005 to the Examiner with a internal stamp date of June 7th 20005 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statement and the initialed and dated IDS statement is attached to this Office action.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

A) Reference number "**27**" for the "**slit-glass**" is not shown in applicant's figure 1, although it is taught on page 9 line 10 and page 9 line 15 of applicant's original specification disclosure. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

B) **Figure 2** shows components "**15**" and "**14**" However the written description of Figure 2 in the specification (i.e. page 11 line 12 through page 12 line 2), does not refer to components "**15**" or "**14**" **with respect to Figure 2**.

C) **Figure 5** shows components "**15**" "**T**" and "**62**" However the written description of Figure 5 found on page 15, and on page 21 line 12 through page 22 line 2, in the original specification, does not refer to components "**15**" "**T**" and "**62**" **with respect to**

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Figure 5. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities:
- A)** On page 10 line 17, **delete** "pager" and **insert** "paper" as applicant's component "P" is taught to represent recording paper, in context the word "pager" is clearly a typographical error.
- B)** On page 13 in line 8 after "source-winding roller" **delete** "84" and **insert** "83" as the "source-winding roller" of figure 2 is actually indicated by component "83", while the "cleaning web" of Figure 2 is actually component 84. [See also the text on page 13 lines 6-8 where applicant has identified in the specification two different components, of figure 2, with the same reference number]. Based on the shown Figure 2, the "source-winding roller" is component "83"; and the "cleaning web" is component 84.
- C)** On page 14 line 9 **delete** "Fig. 4" and **Insert** "Fig. 4a" Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. **Claims 1-8** are rejected under **35 U.S.C. 103(a)** as being unpatentable over **Naohiro** Japanese Publication **2002-304084** published October 18th 2002. The examiner notes that this Japanese Reference was cited on applicant's IDS statement and cited in the original disclosure, however only the abstract of this reference has been provided to the Examiner in English. The examiner has provided the citations below from the provided English abstract, and a rough unofficial machined translation, that may contain errors because some portions of the attempted unofficial "machined translation" are grammatically awkward and may be the result of the unofficial "machine" translation error.

8. Applicant please note that the examiner does not provide unofficial machined translations to applicant, because they are "unofficial", and may not reflect the teachings of a reference correctly. If applicant wishes to argue any of the rejections below applicant must provide, with the next response to this office action, a complete "certified" English translation of the applied **Naohiro** reference, which applicant has confirmed to be free of translational errors so that the examiner can "officially" evaluate the merits of this "certified" English translation of the applied **Naohiro** reference, with respect to the applicant's presented arguments to this office action, and the currently pending claims. In view of the lack of an "official" certified English translation of the **Naohiro** Japanese reference, and in view of what the examiner can understand from the drawn figures and the English component numbers of the **Naohiro** Japanese reference, the following rejections meet the applicant's currently pending claims.

9. With respect to **Claim 1**, **Naohiro** teaches and shows "A fixing device" (see abstract), "comprising: a heating roller" (i.e. component 40 of figure 4) being rotatable

in a rotating direction" (i.e. figure 1 is suggestive of a clockwise directional rotation given the direction of the arrow and the exiting location of paper P in figure 1) [See abstract, figures 1 and 4] **Naohiro** shows and suggests in figures 1 and 4 that the heat roller 40 has "a rotating circumferential surface to come in contact with a recording medium" (i.e. the paper P) "holding non-fixed developing agent images" (i.e. suggested from the T or toner component 50 in figure 4 of the developing images) "so as to heat and melt said non-fixed developing agent images;" [See **Naohiro** paragraph 2, paragraph 7] "and a temperature detecting unit" (i.e. thermistor temperature detecting components 30 and 33 comprise the temperature detecting of **Naohiro** in figures 1 through 5, the abstract and the text where these components are referenced) "having a temperature detecting element" (i.e. thermistor temperature detecting element 33) [See figures 2 through 5, abstract, and paragraphs [0001] through [0022] "to detect temperature of said rotating circumferential surface of said heating roller" [See paragraphs [0007] through [0022] "and a support member to support said temperature detecting element;" (i.e. thermistor component 30 supports thermistor temperature detecting element 33) [See figures 1 through 5; and paragraphs [0007] through [0022]]

10. **Naohiro** shows and suggests in figure 4 that "said support member" (i.e. component 30) "is arranged to come in contact with said rotating circumferential surface at a first contact position on said rotating circumferential surface" [See figure 4] and that "said temperature detecting element" (i.e. component 33) "is arranged to come in contact with said rotating circumferential surface at a second contact position on said rotating circumferential surface" [See Figure 4] The examiner notes that the first contact point is where component 30 contacts heating roller 30 and that the second point of contact is where component 33 makes a thermal contact to roller 40 through support thermistor component 30. The examiner also notes that after component 33 is no longer in thermal contact with heating roller 40 that the contact established between component 30 and heating roller 40 remains until the heating roller's rotation breaks the physical contact which is a small distance in front of component reference number 32 in figure 4] **Naohiro** also shows in figure 4 that "said second contact position is located upstream of said first contact position in the rotating direction" [See figure 4].

11. **Naohiro** lacks directly teaching a verbatim recitation of applicant's claim 1, with all features provided in an exact verbatim manner as set forth by applicant, however, from what the examiner has been able to ascertain from the reference, the applicant's provided limitations are shown and suggested from the English abstract, the figures, the English component numbers, and the "unofficial" machined translation of the text. It would have been obvious to one of ordinary skill in the art at the time that the invention was made that given that the reference provided is not in English, and that the abstract and figures are suggestive of applicant's claim limitations, that the **Naohiro** reference is applicable to the presented claims. The Examiner also notes that applicant cites the **Naohiro** reference on page 2 of the original disclosure, but fails to disclose how the structure of the **Naohiro** reference fails to provide a structural arrangement or the necessary components that meet the requirements of applicant's claims. In the examiner's review of the structures shown in the **Naohiro** reference, as best as the examiner can determine from figures 1 through 5, but mainly figures 1, 3, and 4, the **Naohiro** references' structural components do include the components specified by applicant and appear to be located and positioned in a manner which meets all claims of the instant application. Therefore, how this reference fails to meet or have the structural requirements of applicant's claims is unclear to the examiner.

12. With respect to **Claim 2**, it would have been obvious to one of ordinary skill in the art at the time that the invention was made that **Naohiro** shows and/or suggests from figure 4 itself that "said second contact position is distant by 1.0 mm or less from said first contact position in the rotating direction" [See figure 4 where the distance between initial contact with component 30, and the location where component 33 makes thermal contact with component 40 directly via component 30 is less than a 1 mm distance.] The same reasons for rejection, and obviousness, that apply to **claim 1** also apply to **claim 2** and need not be reiterated.

13. With respect to **Claim 3**, it would have been obvious to one of ordinary skill in the art at the time that the invention was made that **Naohiro** teaches and shows from the figures, abstract, and the teachings of the text concerning heat-resistant sheet component 32 that "said temperature detecting element comes in contact with said

heating roller via a heat-resistant film. " [See figures 2 through 5; paragraphs [0017], [0018], and [0020].] The same reasons for rejection, and obviousness, that apply to **claim 1** also apply to **claim 2** and need not be reiterated.

14. With respect to **Claim 4**, it would have been obvious to one of ordinary skill in the art at the time that the invention was made that **Naohiro** suggests and shows from the viewing of figures 4 and 5 in successive combination that "said support member is mounted movably so that said second contact position of said temperature detecting element can be adjustable. " [See figures 4 and 5 and the difference in height of component 30, with respect to heating roller 40 and the location of the toner 50. In figure 4 the component 30 directly presses against component 40, while in figure 5 there is a vertical space between the components 30 and 40 through which component 50 is shown to pass.] The same reasons for rejection, and obviousness, that apply to **claim 1** also apply to **claim 2** and need not be reiterated.

15. With respect to **Claim 5**, it would have been obvious to one of ordinary skill in the art at the time that the invention was made that **Naohiro** suggests and shows from the viewing of figures 1 through 5 that, "said support member is a" flat rectangular shaped "plate member and wherein one end portion of the plate member is fixed in the fixing device" (i.e. see figure 1) "and the other end portion of the plate member is pressed toward said rotating circumferential surface so that said plate member comes in contact with said rotating circumferential surface at the first contact position." [See figures 1 through 5 in combination] The same reasons for rejection, and obviousness, that apply to **claim 1** also apply to **claim 5** and need not be reiterated.

16. With respect to **Claim 6**, it would have been obvious to one of ordinary skill in the art at the time that the invention was made that **Naohiro** suggests and shows from the viewing of figures 3 and 4 in successive combination that "said plate member" (i.e. component 30) is separated into two plates and said temperature detecting element is supported between the two plates." [See figures 3 and 4 in successive combination; and the textual teachings of paragraphs [0001] through [0023] which describe the components shown in the figures 1 through 5.] The same reasons for rejection, and

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obviousness, that apply to **claims 1**, and **5** also apply to **claim 6** and need not be reiterated.

17. With respect to **Claim 7**, it would have been obvious to one of ordinary skill in the art at the time that the invention was made that **Naohiro** teaches, suggests, and shows from the viewing of figures 1 through 5 and the teachings of paragraphs [0017], [0018], and [0020] that "said plate member is covered with a heat-resistant film" (i.e. heat resistant sheet 32) "and" shows that "said plate member comes in contact with said rotating circumferential surface through the heat-resistant film." [See figures 1 through 5 and the teachings of paragraphs [0017], [0018], and [0020] concerning component 32] The same reasons for rejection, and obviousness, that apply to **claims 1, 5, 6** also apply to **claim 7** and need not be reiterated.

18. With respect to **Claim 8**, it would have been obvious to one of ordinary skill in the art at the time that the invention was made that **Naohiro** directly teaches, and shows "An image forming equipment, comprising: said fixing device described in **claim 1**." [See paragraph [0001], and figure 1] The same reasons for rejection, and obviousness, that apply to **claim 1** also apply to **claim 8** and need not be reiterated.

19. The **prior art made of record** and not relied upon is considered pertinent to applicant's disclosure. Applicant should review the structures and examiner comments concerning all of the references provided below.

A) Hasegawa et al., US patent application Publication 2002/0118977 A1 published August 29th 2002, and filed November 30th 2001; which corresponds to **Hasegawa et al.**, US patent 6,701,102 B2 listed below..

B) Hasegawa et al., US patent 6,701,102 B2 issued March 2nd 2004, and filed November 30th 2001.

C) *Izawa et al., US patent 6,763,205 B2 issued July 13th 2004, filed October 4th 2002. This reference is similar to the applied **Naohiro** reference, but with more variations and a slight referential differences in defining upstream and downstream. This reference has not been applied at this time, because the **Naohiro** reference more clearly shows each of applicant's currently pending claims. However the examiner suggests that the applicant review the teachings of this reference completely, since the

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number of component variations taught and shown by **Izawa et al.**, potentially include additional features, which are not currently recited in applicant's claims.

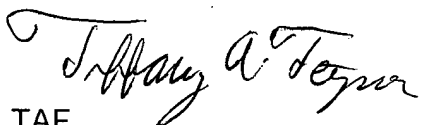
D) *Nobuo Japanese Publication **2001-005333** published January 12th 2001 from applicant's original IDS statement. This reference also appears to be applicable to all pending claims, however an 'unofficial' machine translation was not available to the examiner, and a complete understanding of what is shown in the figures is not possible without the full English text. This reference was not considered beyond the English Abstract provided. If applicant wishes this reference to be fully considered by the examiner, a complete 'certified' English translation of this reference should also be provided, with the next response by applicant.

E) Fujita et al., US patent Application Publication 2004/0240912 A1 published December 2nd 2004, filed March 9th 2004, which is the corresponding publication of applicant's instant application, which is not prior art and is noted for the purposes of a complete record only.

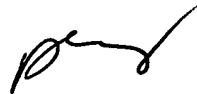
Conclusion

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tiffany Fetzner whose telephone number is: (571) 272-2241. The examiner can normally be reached on Monday-Thursday from 7:00am to 4:30pm., and on alternate Friday's from 7:00am to 3:30pm.

21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez, can be reached at (571) 272-2245. The **only official fax phone number** for the organization where this application or proceeding is assigned is **(571) 273-8300**.



TAF
September 18, 2005



Diego Gutierrez
Supervisory Patent Examiner
Technology Center 2800